### SINGLE-FAMILY RESIDENCE SECURITY SURVEY FORM AND REFERENCE MATERIAL

San Diego Police Department Neighborhood Policing Resource Team August 26, 2009

This paper contains reference material for the various elements of a single-family residence security survey. The section numbers correspond to the areas of evaluation in the survey form that is included at the end of this paper. They are: (1) Doors and Gates, (2) Windows and Other Openings, (3) Lighting, (4) Landscaping, (5) Premises Identification, (6) Garages, and (7) Property Condition. The letters correspond to the specific items assessed in the survey. Items that need attention should be checked and corrective measures identified from this material.

This material deals with the physical elements of the residence, not personal security practices at home. Tips on the latter are available in the Crime Prevention and Education section of the SDPD's website at **www.sandiego.gov/police**.

You can also call the SDPD Community Relations Officer in your area to arrange for a free residential security survey. SDPD division addresses and phone numbers are listed below.

#### SDPD AREA STATIONS

Central	2501 Imperial Ave. SD 92102	(619) 744-9500
Eastern	9225 Aero Dr. SD 92123	(858) 495-7900
Mid-City	4310 Landis St. SD 92105	(619) 516-3000
Northeastern	13396 Salmon River Rd. SD 92129	(858) 538-8000
Northern	4275 Eastgate Mall SD 92037	(858) 552-1700
Northwestern	12592 El Camino Real SD 92130	(858) 523-7000
Southeastern	7222 Skyline Dr. SD 92114	(619) 527-3500
Southern	1120 27th St. SD 92154	(619) 424-0400
Western	5215 Gaines St. SD 92110	(619) 692-4800

#### 1. DOORS AND GATES

### a. Single Door Construction

Single-swing wooden doors are either of solid or hollow core construction. All exterior doors should be solid, at least 1-3/4 inches thick, and have a deadbolt lock.

### **b.** Double Doors

Double doors should have flush bolts installed at the top and bottom of the inactive door. These offer additional security because intruders cannot easily get them unlocked when the door is properly secured. The bolts should be made of steel and have a throw of at least 1 inch.

#### c. Deadbolt Locks

Doorknob locks offer no security. Burglars can easily defeat them. All exterior doors and interior doors to garages should have an additional high-quality deadbolt lock.

Deadbolt locks are of two basic types, single-and double-cylinder. The former has a thumb turn on the inside. The latter requires a key to lock or unlock the door from either side. It is not permitted in the Fire Code. Deadbolts should have the following characteristics:

- Throw of at least 1 inch.
- Free-spinning and tapered or angled outer edge of the cylinder guard. This makes it difficult for a burglar to twist off the lock.
- Solid brass, bronze, or steel exterior.
- Steel rods or bolts at least ¼-inch in diameter connecting the exterior of the lock to the inside part.
- 5-pin tumbler system locking mechanism.
- Changeable locking cores.

### d. Other Door Hardware

**Peepholes** with a wide-angle (180 deg) viewer should be installed in exterior doors to allow persons at the door to be identified without them knowing they are being observed.

*Hinges* should be located on the interior side. Doors with exterior hinges can be a problem if their pins can easily be removed. Then the door can be opened from the outside. Pins can be secured in various ways, depending on the construction of the door and frame. One way to secure pins in solid wood doors and frames is as follows:

- Drill a 1/2-inch deep hole in the side of the door just above the hinge.
- Insert a 1-inch screw or nail in the hole and leave ½ inch protruding.
- Close the door until the screw or nail contacts the frame.
- Drill a 1/2-inch deep hole in the frame at this point. The screw or nail will fit into this hole when the door is closed to secure the door.

*Strikes* are the metal plates that are attached to the doorframe or jamb to receive the latch or bolt throw. They should be of heavy-duty construction and installed with at least 4 screws that are 3 to 4 inches long and anchored securely into a wall stud. Otherwise, they become a weak link in door security.

## e. Sliding-Glass Doors

Exterior sliding-glass patio-type doors must be secured to prevent both horizontal and vertical movement. Deadbolt locks provide the greatest security. Less effective secondary locking devices include the following: a pin in the upper track that extends downward through the inner door frame and into the outer door frame, a thumbscrew-type lock mounted on the top or bottom track, a wooden or metal dowel placed snugly in the lower

track to prevent horizontal movement, and a metal strip or a few metal screws in the track above the door to prevent vertical movement.

#### f. Side-Yard Gates

Because side or back entries are the most common access points for burglars, it is important that side-yard gates be provided and kept locked at all times. Gates that are opened on the inside by a handle or knob should have shields that prevent a person from reaching in to open them. They should also be tall enough so that a person cannot easily climb them or reach over the top to open them. If a gate has a beveled latch, it should be shielded so a person cannot insert a wire or bar between the frame and the gate and push in the latch. A deadbolt lock with a cylindrical latch would be even better. Gates should be at least 6 feet high and have springs that close them securely after a person goes through.

Gates that are secured by padlocks should use shielded (shrouded-shackle) locks that cannot be cut with bolt cutters. Otherwise padlocks should have the following characteristics:

- Hardened steel shackles at least 9/32 inches in diameter. Stainless steel or heavier shackles offer additional security.
- Double-locking mechanism at the fixed and movable ends (heel and toe).
- 5-pin tumbler.
- Key opening. Combination locks typically have very weak bodies.
- No readable key code numbers. Numbers on the lock should be recorded and eliminated.
- Key retention, which prevents the key from being removed when the lock is open. This reminds people to keep the lock closed so that someone cannot "borrow" it to have a key made.

#### 2. WINDOWS AND OTHER OPENINGS

### a. Secondary Locking Devices

**Double-hung sash** windows can be secured by drilling a hole that angles downward through a top corner of the bottom window into the bottom corner of the top window on both sides of the window, and placing an eyebolt or nail in the hole to prevent the window from being opened.

**Louvre** windows are difficult to secure because the individual panes can easily be removed. This can be made more difficult by applying a two-part epoxy resin to glue the panes together. However, it is much better to replace this type of window with solid glass or some other type of ventilating window.

*Casement* windows can be secured with key-locking latches. Make sure that the protrusion on the window that the lock is attached to is made of steel and not worn, and that the window closes properly and is not bowed or warped.

*Sliding-glass* windows can be secured by the secondary locking devices described in Sec. 1.e for sliding-glass doors.

#### **b. Viewing Windows**

Viewing windows in the door or near the lock side of entry doors should be made of laminated glass or a clear acrylic plastic. This will prevent a burglar from breaking a hole in the window and reaching in to unlock the door.

### c. Grilles and Bars

Horizontal and vertical bars provide excellent security as long as the retaining bolts cannot be removed from the outside. However, bars on windows in sleeping rooms and emergency escape or rescue windows in basements must meet Fire Code requirements for release mechanisms to permit escape from the inside in case of a fire.

### d. Other Openings

Pet doors, crawl spaces, ventilation windows, and other openings should also be secured. And make sure that window air conditioners are installed securely and cannot easily be removed from the outside.

### 3. EXTERIOR LIGHTING

### a. Lighting at Night

Uniform four-corner exterior lighting is important, particularly where there are dark areas around the residence. Floodlights installed under eaves can illuminate these areas and expose a person next to the house. Timers or photoelectric cells can be used to turn lights on at dusk and off at dawn. And motion sensors can be used to turn lights on when any motion is detected. Streetlights or lights from adjoining properties should not be relied on for lighting the property at night.

It is also important that burnt-out bulbs are replaced promptly, wire covers be installed over lights to protect them from vandals, and lights directed so they don't shine into the eyes of passing motorists or police patrols.

#### **b. Secure Electrical Power**

Because lights and other security systems work on electrical power it is important that measures be taken to prevent disruption of external power or provide internal backup power. At a minimum, external circuit breakers should be installed in a sturdy box that is locked with a shielded padlock.

#### 4. LANDSCAPING

# a. Denying Hiding Places

Well-trimmed landscaping deters criminals by denying hiding places and allowing good visibility on the property. Canopies of mature trees should be maintained at least 8 feet above the ground. Bushes should be trimmed to less than 3 feet except where privacy or environmental noise mitigation is a primary concern, or where higher plants would not block any windows, lighting, or provide hiding places. For example, higher bushes or trees with lower canopies could be planted next to a blank wall or the side of a home.

### **b.** Defensive Plants

Locate plants with prickly leaves or thorns like bougainvillea and natal plum below windows and along fences as barriers to control access.

#### c. Tree Trimming

Trees should be trimmed so that limbs do not provide access to roofs and second-story windows, or a means of getting over fences and walls.

### 5. PREMISES IDENTIFICATION

#### a. Visible Address Numbers

Good premises identification is needed to enable the police, fire, and other service providers to find a residence quickly in an emergency. Address numbers must be on a contrasting background and located above the doorway or in a position where they are plainly visible and legible from either direction of approach from the street fronting the property. They must be at least 4 inches high on individual dwellings and duplexes. And they should also be lighted so they can be seen at night.

### b. Optional Curb or Mailbox Numbers

Numbers on curbs or mailboxes are not permitted to be the sole means of residence identification. Numbers painted on curbs should be located near driveways where they are not likely to be blocked by parked vehicles.

#### 6. GARAGES

### a. Vehicle Parking

The best way for residents to prevent crimes involving their vehicles is to keep them in their garages. However, too often people use their garages for storage or other things and park their vehicles on their driveways or on the street where criminals have easy access to them. This is a violation of San Diego Municipal Code Sec. 142.0510(a) which states that "Required *off-street parking spaces* ... shall be used only for parking operable vehicles."

#### b. Door Hardware

*Electric garage door openers* are generally effective in securing garage doors. A multi-frequency opener should be used to prevent the door from being opened by other radio signals.

*Hardened steel hinges, hasps, and padlocks* should be used to secure lifting garage doors. Padlock characteristics are listed in Sec. 1.f. Additional security can be provided by installing *cane bolts* or *sliding hasps* on the inside of the door. The door should also be mounted so that the bottom cannot be lifted up to enable someone to crawl in.

## c. Garage Door Windows

Windows should be made of unbreakable glass or plastic that a burglar cannot easily break and reach in to unlock the door. They should also provide one-way visibility from the inside so a burglar cannot see into the garage.

#### d. Deadbolt Lock on Door to Home Interior

The door from the garage to the home interior should also have a deadbolt lock. This provides additional home security.

#### 7. PROPERTY CONDITION

The residence and its yard should be kept in good condition. Criminals are attracted to property in poor condition because it shows that the owners or tenants don't care about it.

#### a. No Graffiti

Graffiti should be removed as soon as possible after it is found. This will discourage further vandalism. The graffiti should be covered with matching paint so a "canvas" is not left for the vandals. While prompt graffiti removal helps to deter further vandalism, any graffiti on the property should be photographed before it is painted over or otherwise removed. Also, pick up (without leaving fingerprints) and save discarded paint cans, etc. The photographs and any other evidence should be given to the investigating law enforcement officers.

Hardware or paint stores should be consulted regarding the best products for removing various types of graffiti from specific surfaces without damaging the surface. Extreme care should be used in applying special graffiti removal products like MEK (Methyl Ethyl Ketone) or "Graffiti Remover" on glass or unpainted surfaces.

#### b. No Trash, Junk, Weeds, Inoperable Vehicles, Etc.

Keep property free of trash, junk, weeds, leaves, dismantled or inoperative vehicles, and other things that indicate neglect. Also remove loose rocks and other objects that could be used to vandalize your property.

### c. Property in Good Repair

Replace or repair broken windows, screens, lights, fences, and gate locks.

### d. Property Borders

Well-built fences, walls, and gates are the first line of defense against criminals. The permissible heights and locations of various types of fences are specified in the San Diego Municipal Code. Sharp pointed fencing, i.e., fencing with spikes or a barbed- or concertina-wire topping, is not permitted in residential areas. Unless privacy and noise reduction are needed, open chain link or ornamental metal fences are preferred because they do not block visibility into the property and are less susceptible to graffiti. Chain link fencing should have its bottom secured with tension wire or galvanized pipe, or embedded in concrete to prevent it from being lifted up to enable a person to crawl in. Fences, walls, and gates should be at least 6 feet high.

### e. Clean Alley

Crime often occurs in alleys because they lack natural surveillance. The chances of crime in alleys can be reduced by the following measures:

- Lighted at night
- Yard walls and fences at least 6 feet high
- Anti-graffiti paint or coatings on walls, fences, and garage doors
- Locks on back-yard gates that cannot be opened by someone reaching through or over the gate
- Locks on garage doors
- No landscaping that obstructs clear lines of sight
- No alcoves that provide hiding places
- Signs prohibiting vehicle parking, trespassing, littering, etc.
- Visible home address numbers
- Free of trash, graffiti, etc.

# SINGLE-FAMILY RESIDENCE SECURITY SURVEY FORM

Address			
Check items that need attention and identify corrective measures on the space provided.			
1. DOORS AND GATES	_ b. Defensive plants		
<ul><li>a. Solid-core construction exterior doors</li><li>b. Flush bolts on double doors</li></ul>	_ c. Trees trimmed to deny access to second story		
_ c. Deadbolt locks	5. PREMISES IDENTIFICATION		
_ d. Other door hardware (peepholes, hinges, etc.) _ e. Sliding-glass doors secured by locking device	_ a. Address number at least 4 in. high, visible from the street, and lighted at night		
_ f. Side-yard gates with locks	_ b. Optional curb or mailbox numbers		
2. WINDOWS AND OTHER OPENINGS	6. GARAGES		
_ a. Secured by secondary locking devices	_ a. Parking space used for vehicles, not for other uses		
_ b. Unbreakable viewing windows	_ b. Secure door hardware		
_ c. Grilles and bars	_ c. Unbreakable door windows		
_ d. Secure other openings	_ d. Deadbolt lock on door to home interior		
3. EXTERIOR LIGHTING	7. PROPERTY CONDITION		
_ a. No dark spots in doorways, paths, porches, etc.	_ a. No graffiti		
_ b. Secure electrical power	_ b. No trash, junk, weeds, inoperable vehicles, etc.		
	_ c. No broken, windows, fences, gates, etc.		
4. LANDSCAPING	_ d. Property borders defined by fences, walls, gates, and		

\_ e. Clean alley

# **CORRECTIVE MEASURES**

8 ft. and shrubs trimmed to less than 3 ft.

\_ a. No hiding places. Tree canopies trimmed to at least landscaping